

KIC 011461134

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
011461134-01	OBS	No	548.970825	478.438304	2739.4	10.456	12.2	6.2	1.84	7281	11.22	3.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011461134-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

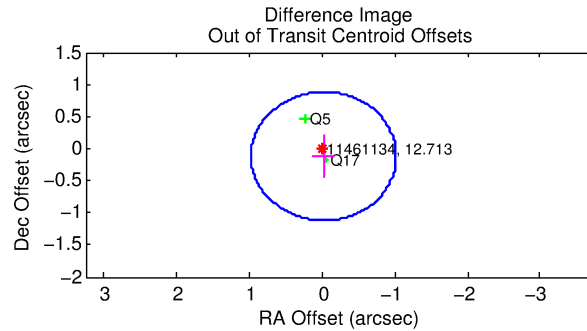
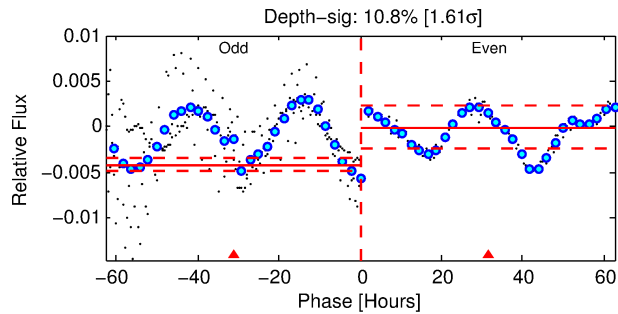
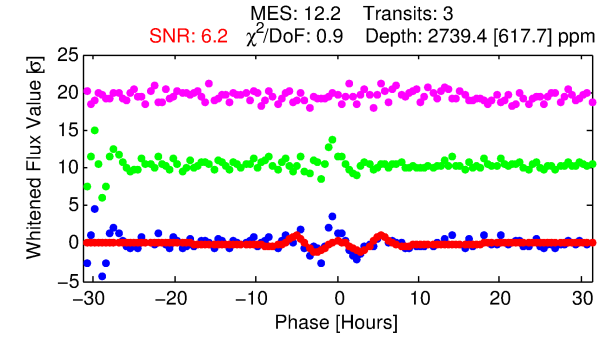
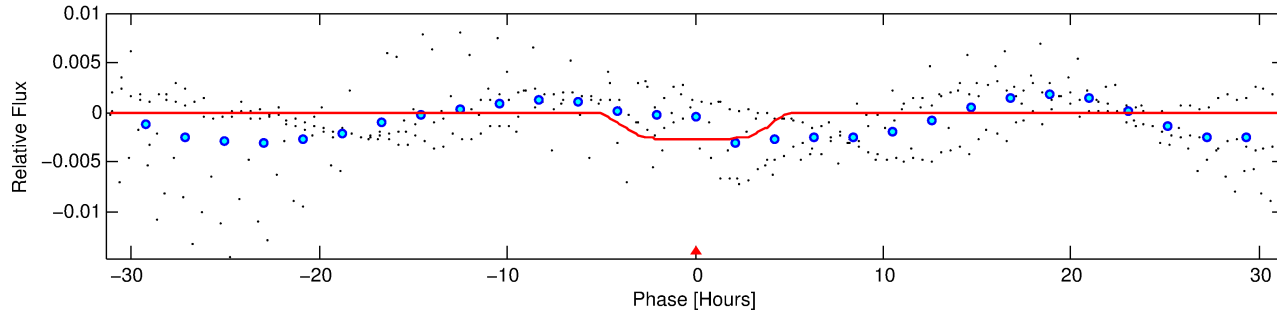
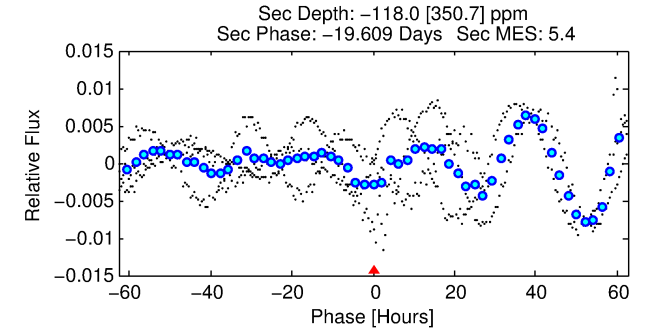
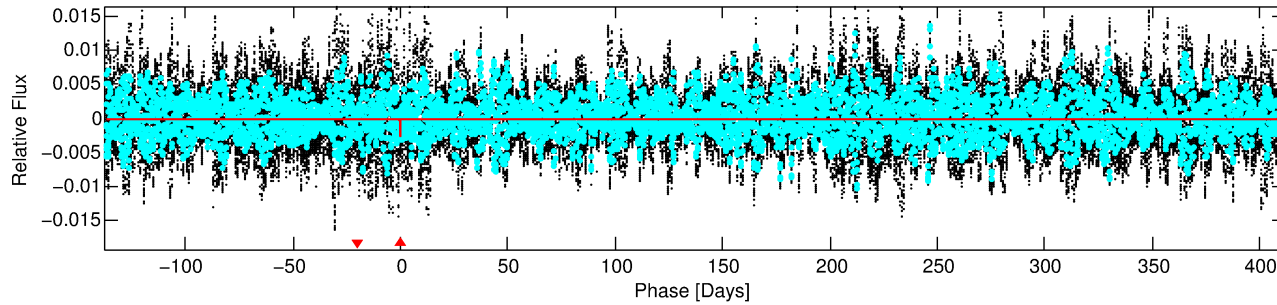
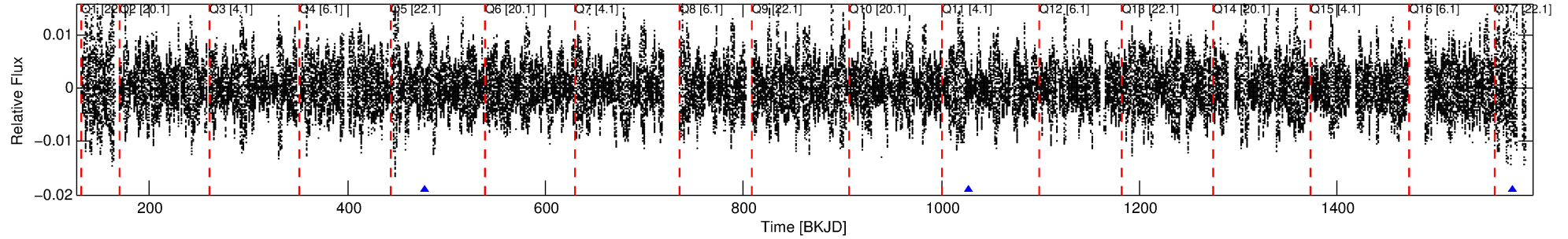
Ephemeris Match Information For 011461134-01

No Significant Match Found

DV One-Page Summary

KIC: 11461134 Candidate: 1 of 1 Period: 548.971 d

Kp: 12.71 R*: 1.84 Rs Teff: 7281.0 K Logg: 4.08 Fe/H: -0.200



DV Fit Results:

Period = 548.97083 [0.00798] d
Epoch = 478.4383 [0.0096] BKJD
Rp/R* = 0.0558 [0.0069]
a/R* = 220.27 [24.49]
b = 0.90 [0.02]
Seff = 3.81 [1.42]
Teq = 356 [33] K
Rp = 11.22 [3.61] Re
a = 1.4971 [0.3582] AU
Ag = N/A
Teffp = N/A

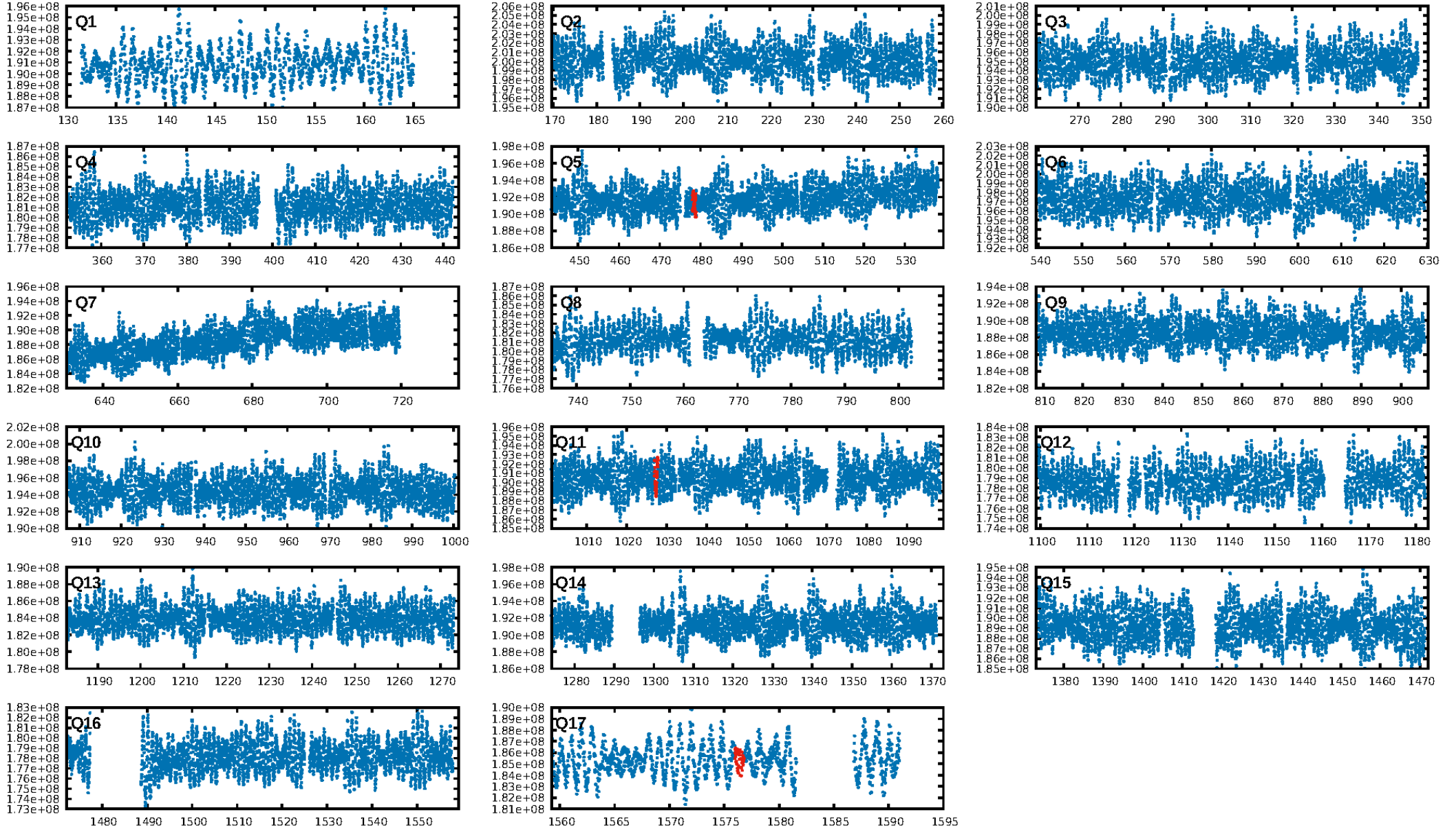
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 90.4%
Bootstrap-pfa: 9.67e-13
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 1.248
Centroid-sig: 30.3%
Centroid-so: 0.283 arcsec [2.78σ]
OotOffset-rm: 0.121 arcsec [0.36σ]
KicOffset-rm: 0.281 arcsec [0.78σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

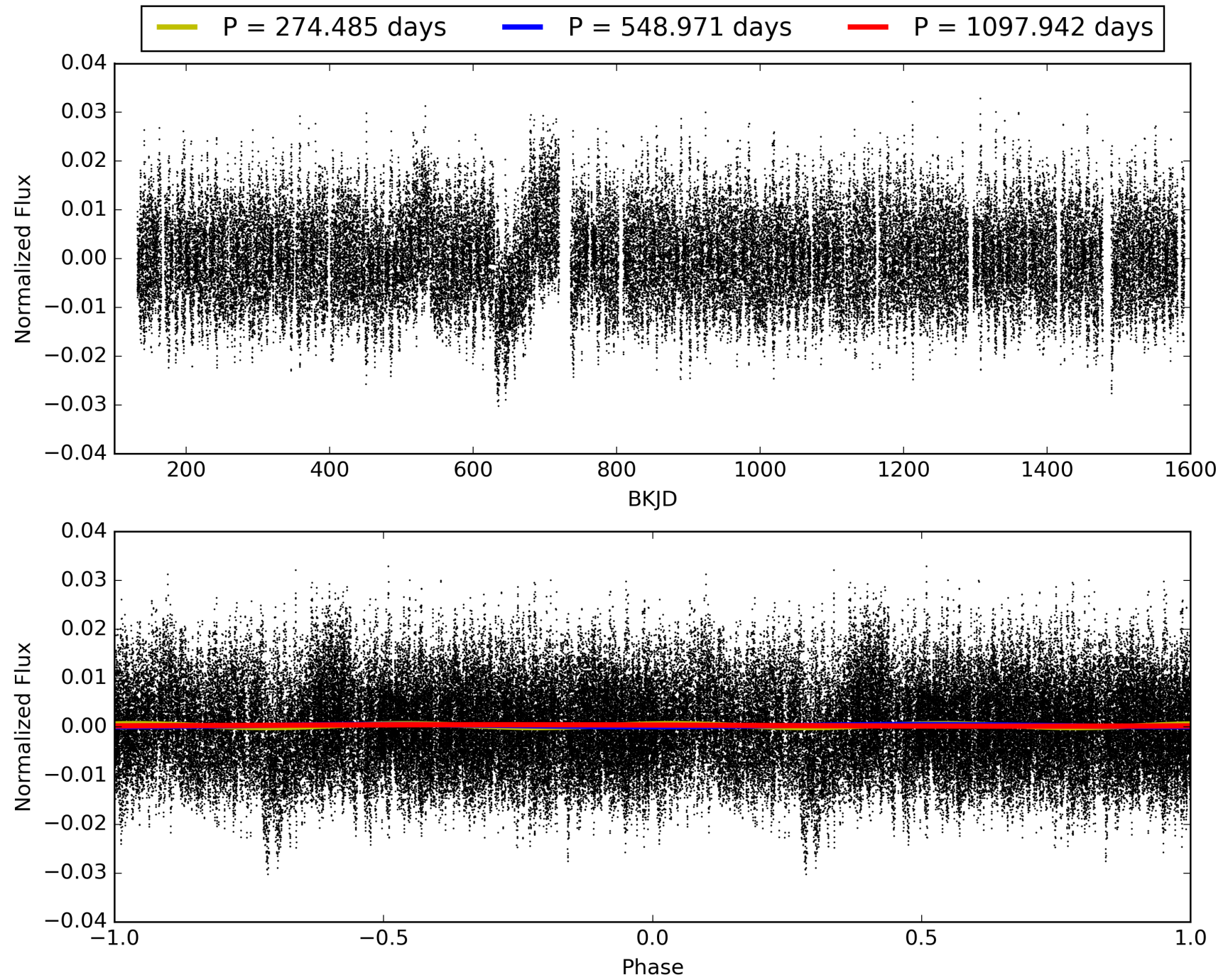
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:11:06 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011461134-01, PDC Light Curves

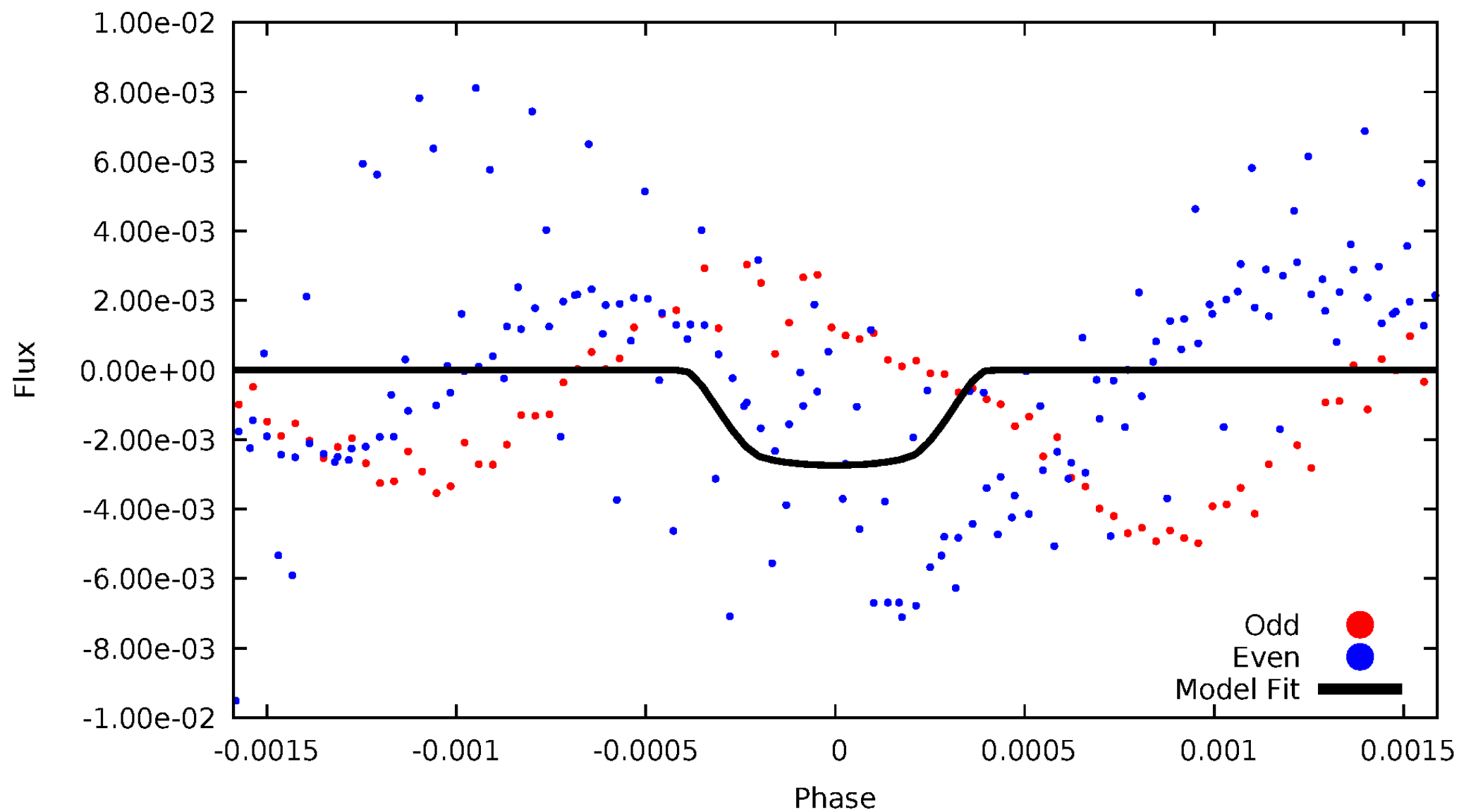


TCE 011461134-01



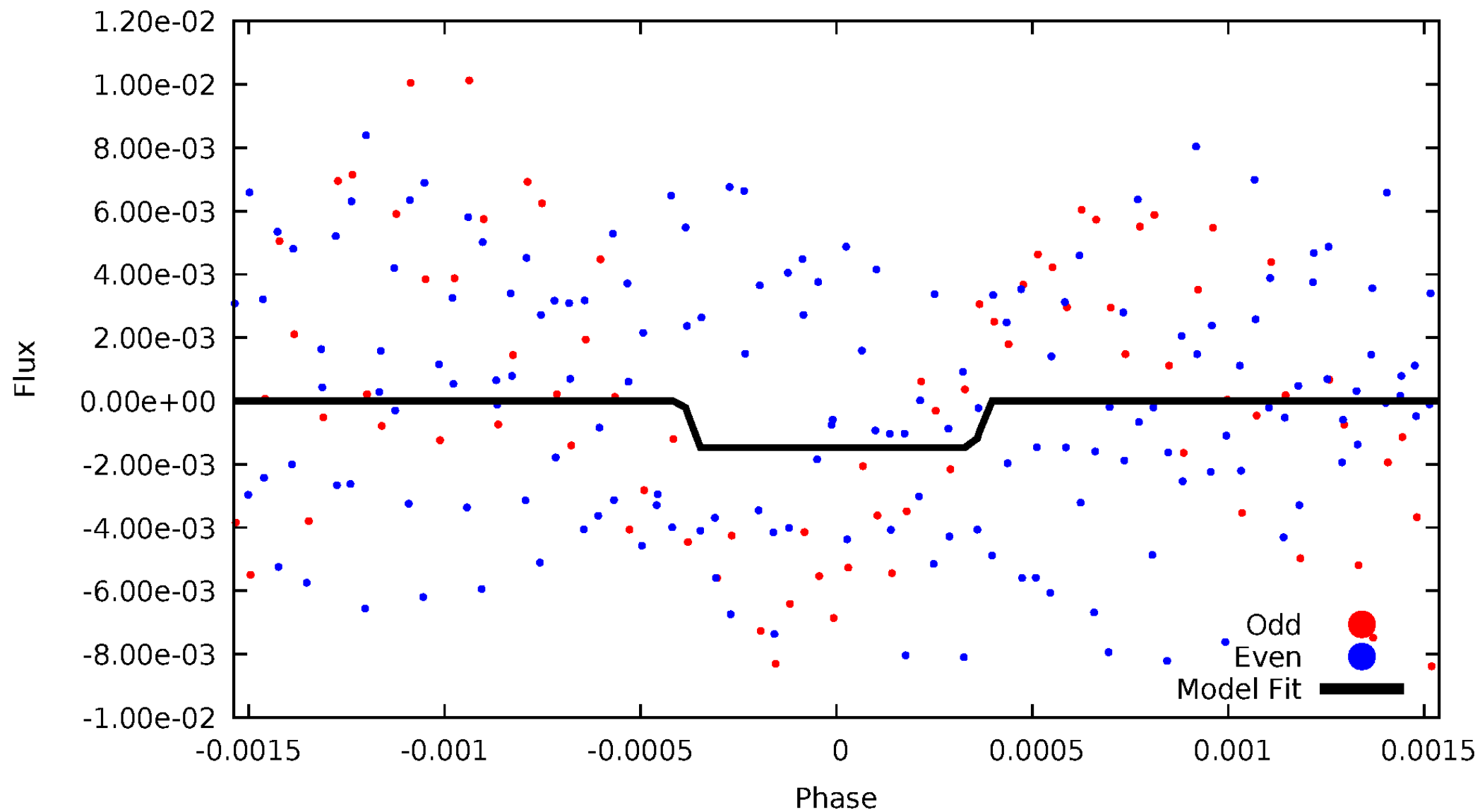
DV Odd/Even

TCE 011461134-01



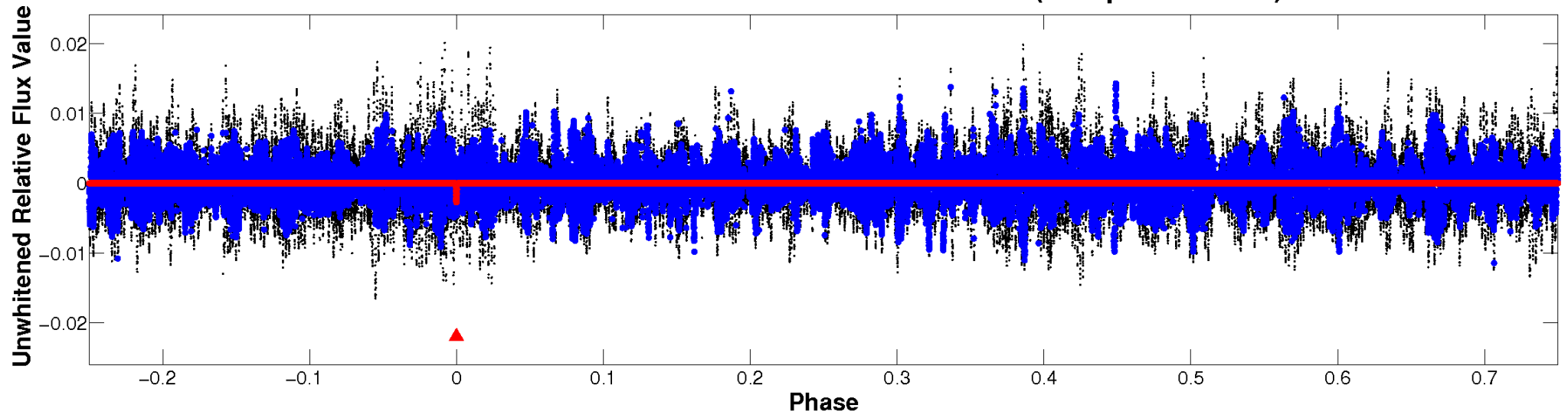
ALT Odd/Even

TCE 011461134-01

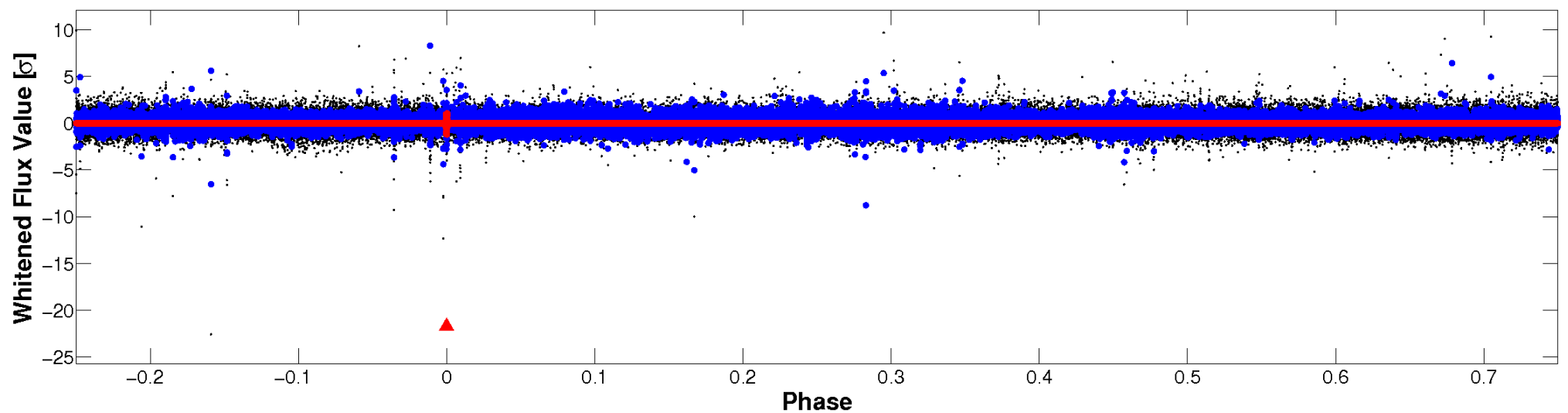


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

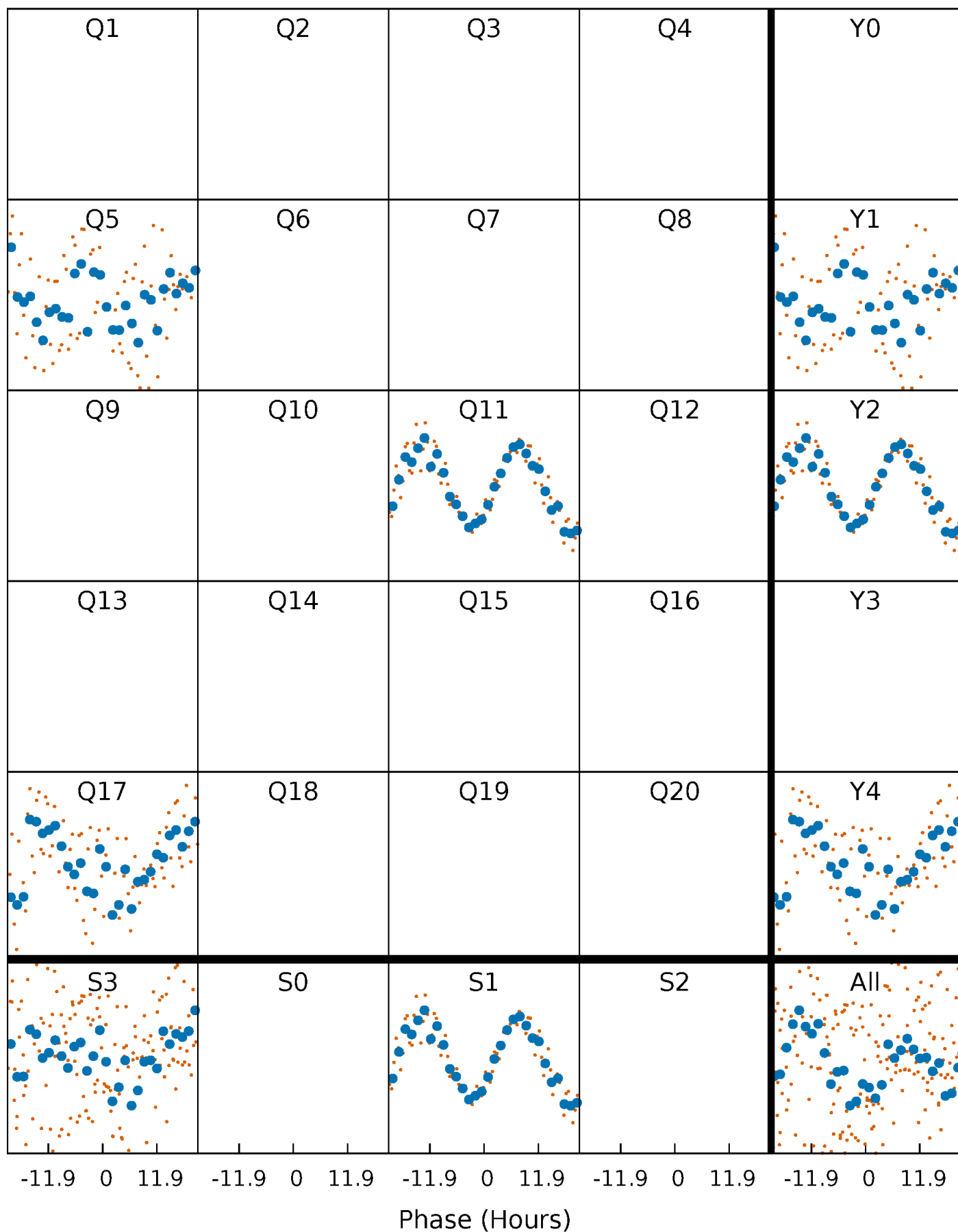


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



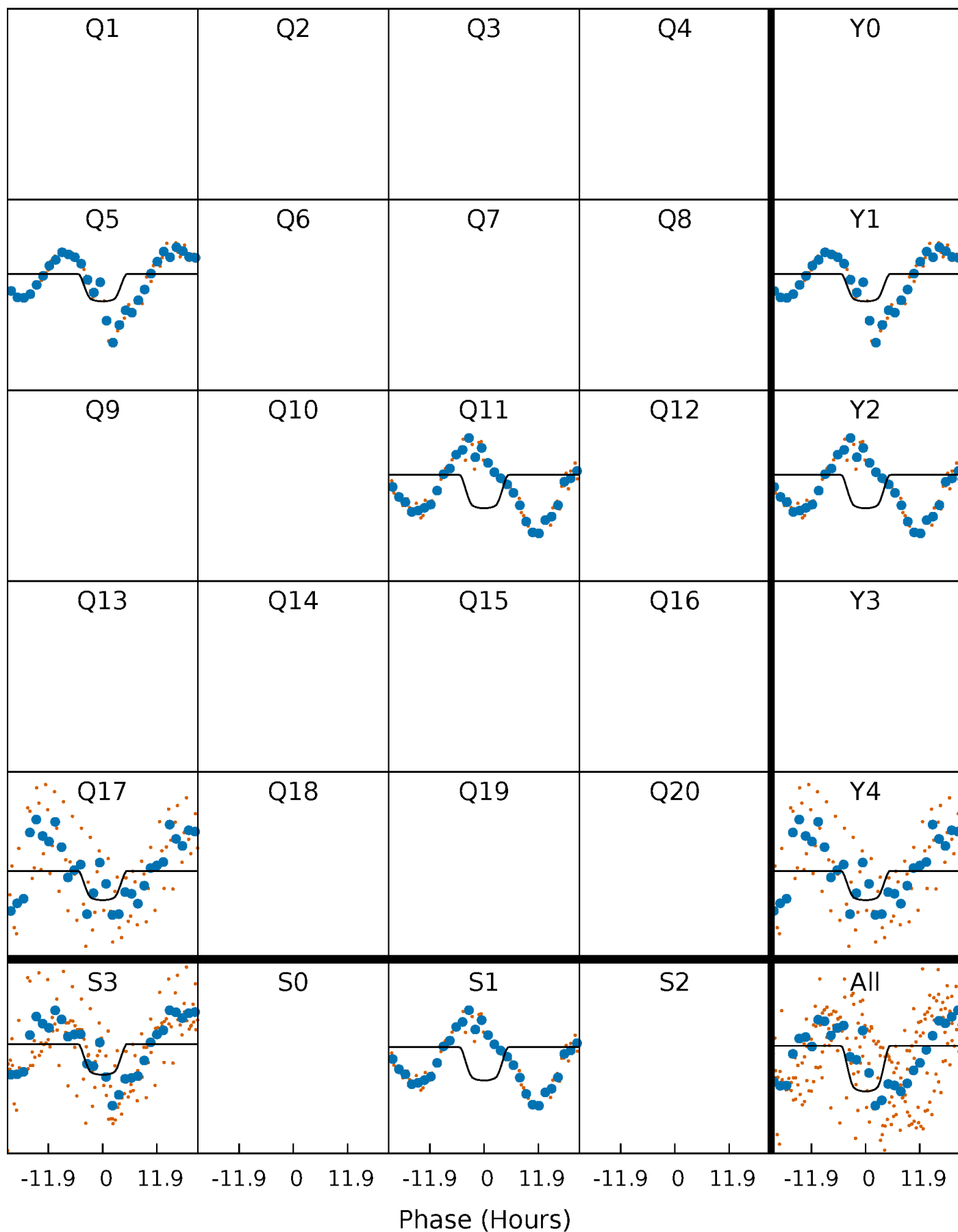
PDC Quarter-Phased Transit Curves

TCE 011461134-01 P=548.970825 Days $T_0=478.438304$ (BKJD)



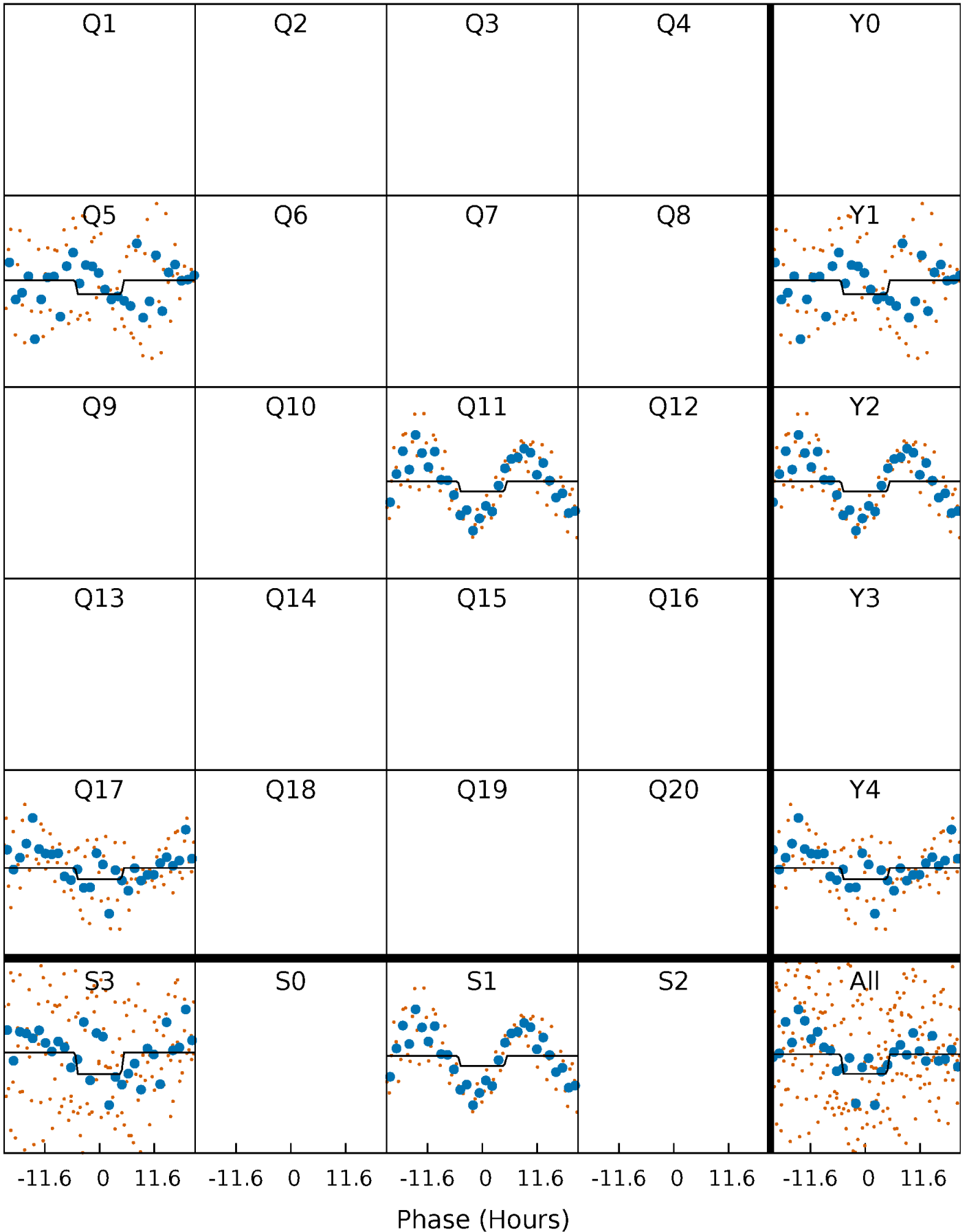
DV Quarter-Phased Transit Curves

TCE 011461134-01 P=548.970825 Days $T_0=478.438304$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

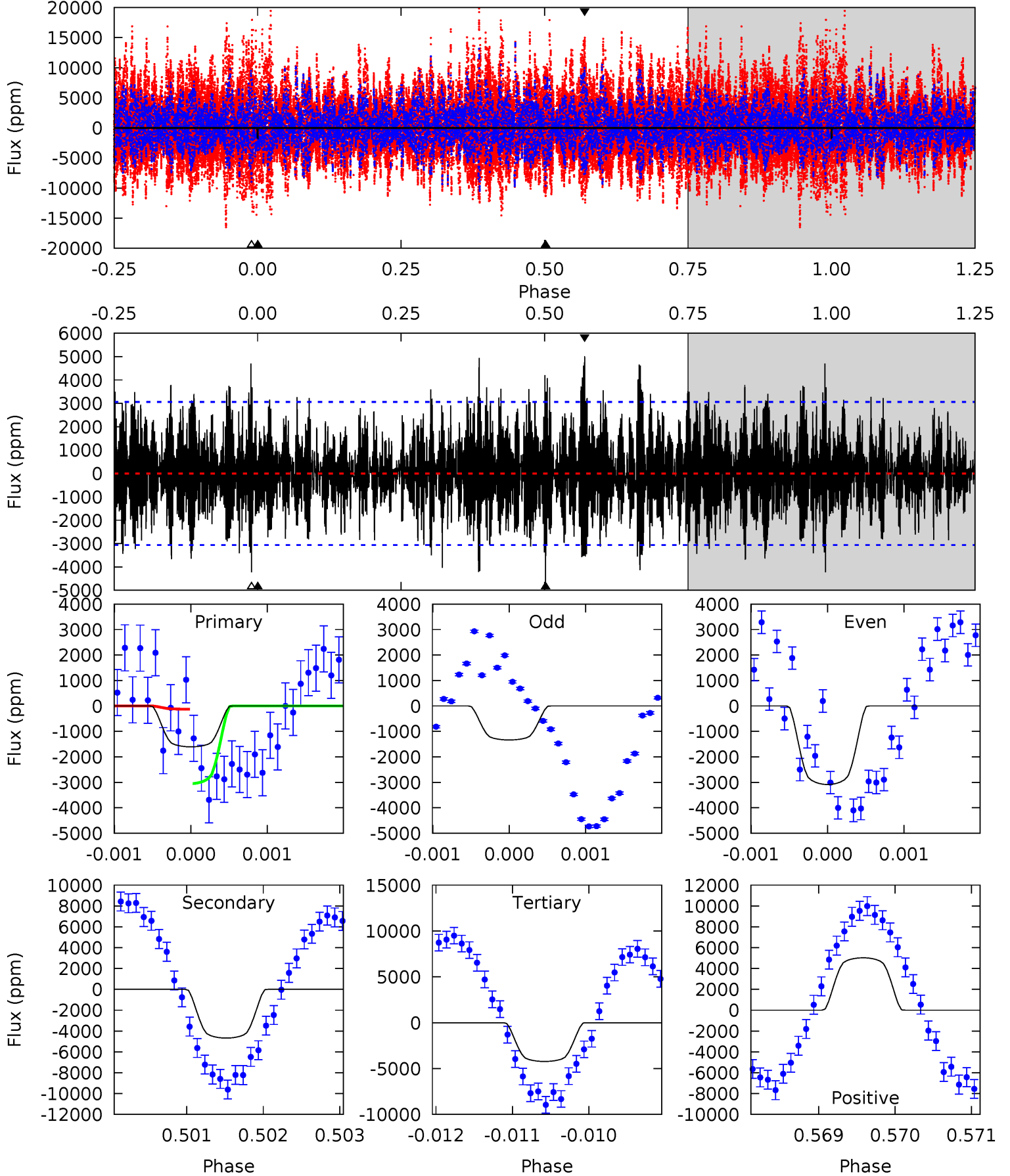
TCE 011461134-01 P=548.988456 Days $T_0=478.398493$ (BKJD)



DV Model-Shift Uniqueness Test

011461134-01, P = 548.970825 Days, E = 478.438304 Days

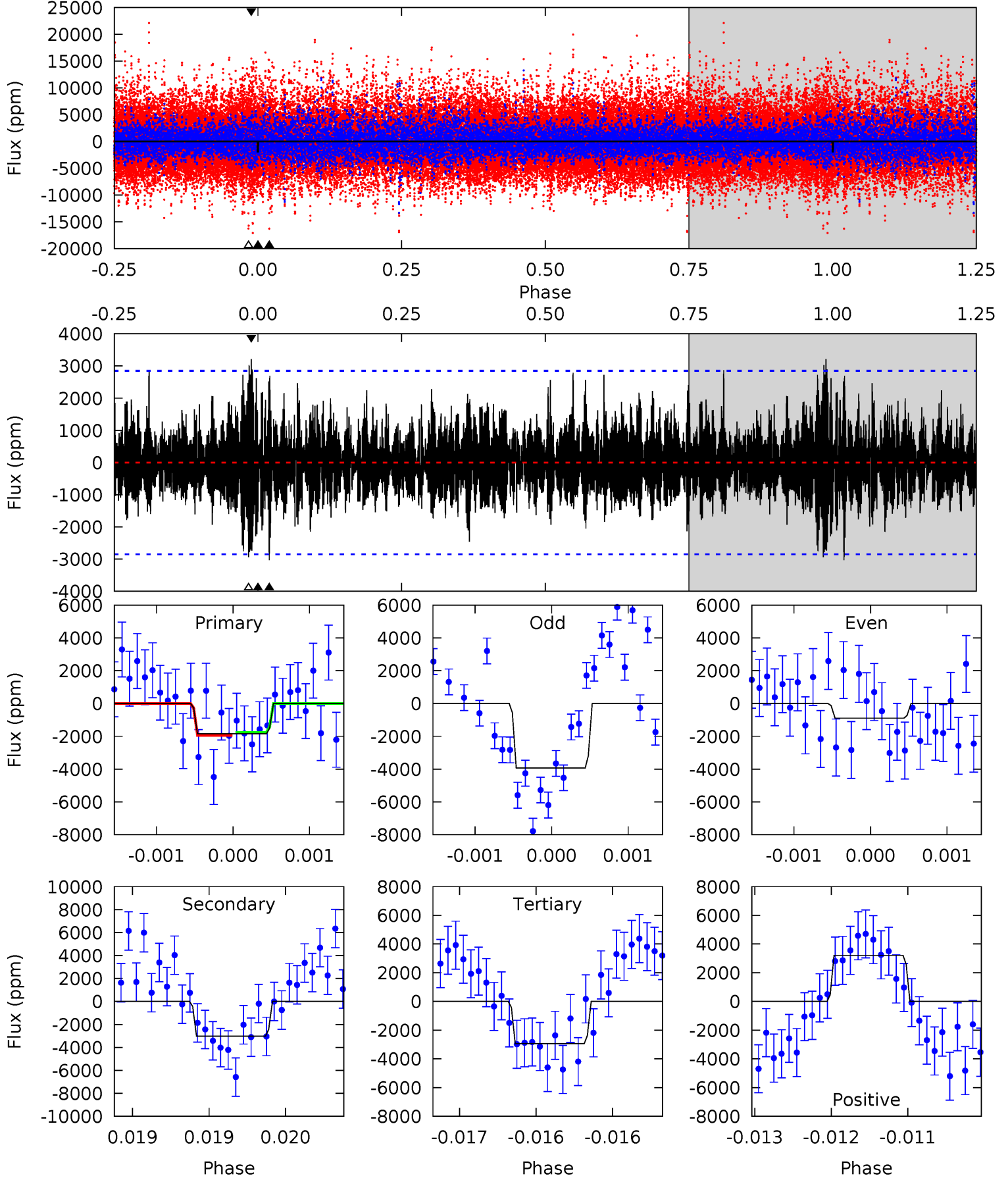
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.88	8.39	7.59	9.02	5.49	3.36	2.47	-4.71	-6.14	0.81	-0.63	1.46	0.72	0.52	2.62



Alt Model-Shift Uniqueness Test

011461134-01, P = 548.988456 Days, E = 478.398493 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.57	5.85	5.67	6.20	5.50	3.37	1.57	-2.10	-2.63	0.18	-0.35	2.70	1.26	0.51	0.16



Stellar Parameters For KIC 011461134

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7281^{+228}_{-304}	$4.079^{+0.175}_{-0.175}$	$-0.200^{+0.250}_{-0.350}$	$1.842^{+0.547}_{-0.448}$	$1.483^{+0.211}_{-0.257}$	$0.334^{+0.374}_{-0.166}$
	+3%/-4%	+4%/-4%	+125%/-175%	+30%/-24%	+14%/-17%	+112%/-50%
Source	KIC0	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011461134-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-4676 ± 557	$11.14^{+2.28}_{-2.03}$	495^{+38}_{-36}	8197^{+925}_{-721}	46079^{+23237}_{-14249}
Alt.	-3032 ± 518	$7.76^{+1.89}_{-1.70}$	498^{+37}_{-38}	9109^{+1532}_{-1147}	62083^{+41028}_{-23654}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

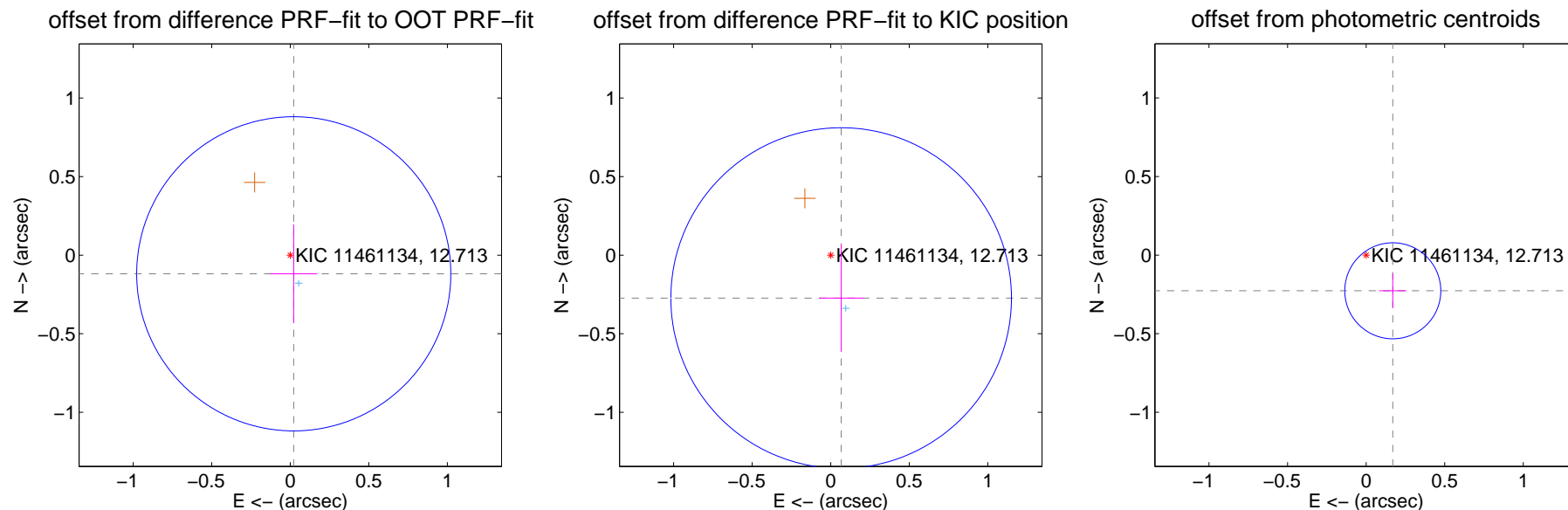
DV Centroid Data

Supplemental centroid analysis for 011461134-01. Kepler magnitude: 12.71. Transit SNR 6.19

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.121 ± 0.333	0.36	-0.022 ± 0.150	-0.119 ± 0.314
PRF-fit source offset from KIC position	0.281 ± 0.361	0.78	-0.066 ± 0.141	-0.273 ± 0.342
photometric centroid source offset	0.28 ± 0.10	2.78	-0.17 ± 0.09	-0.23 ± 0.11

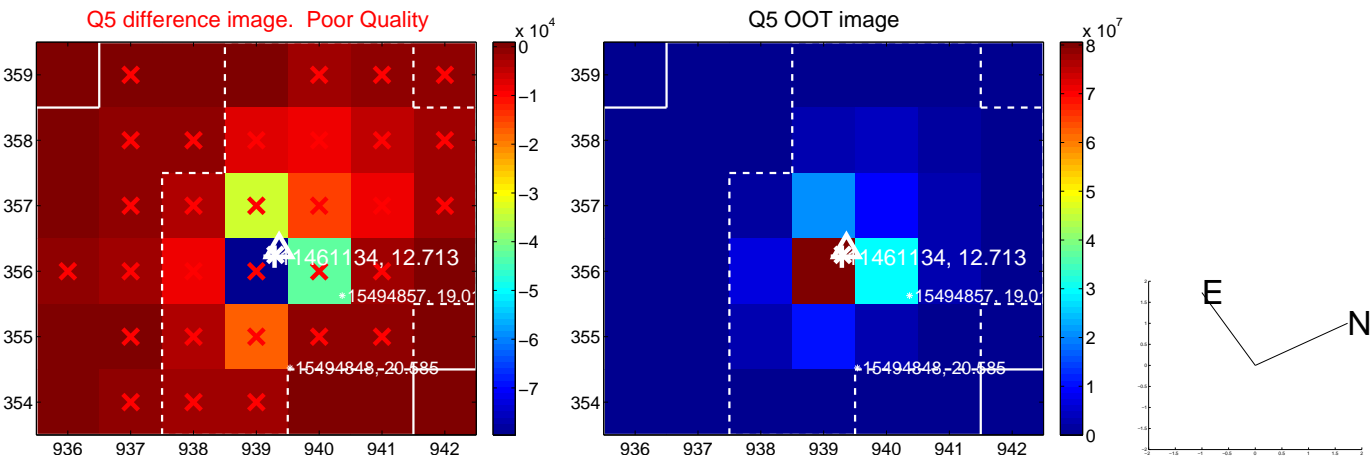


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



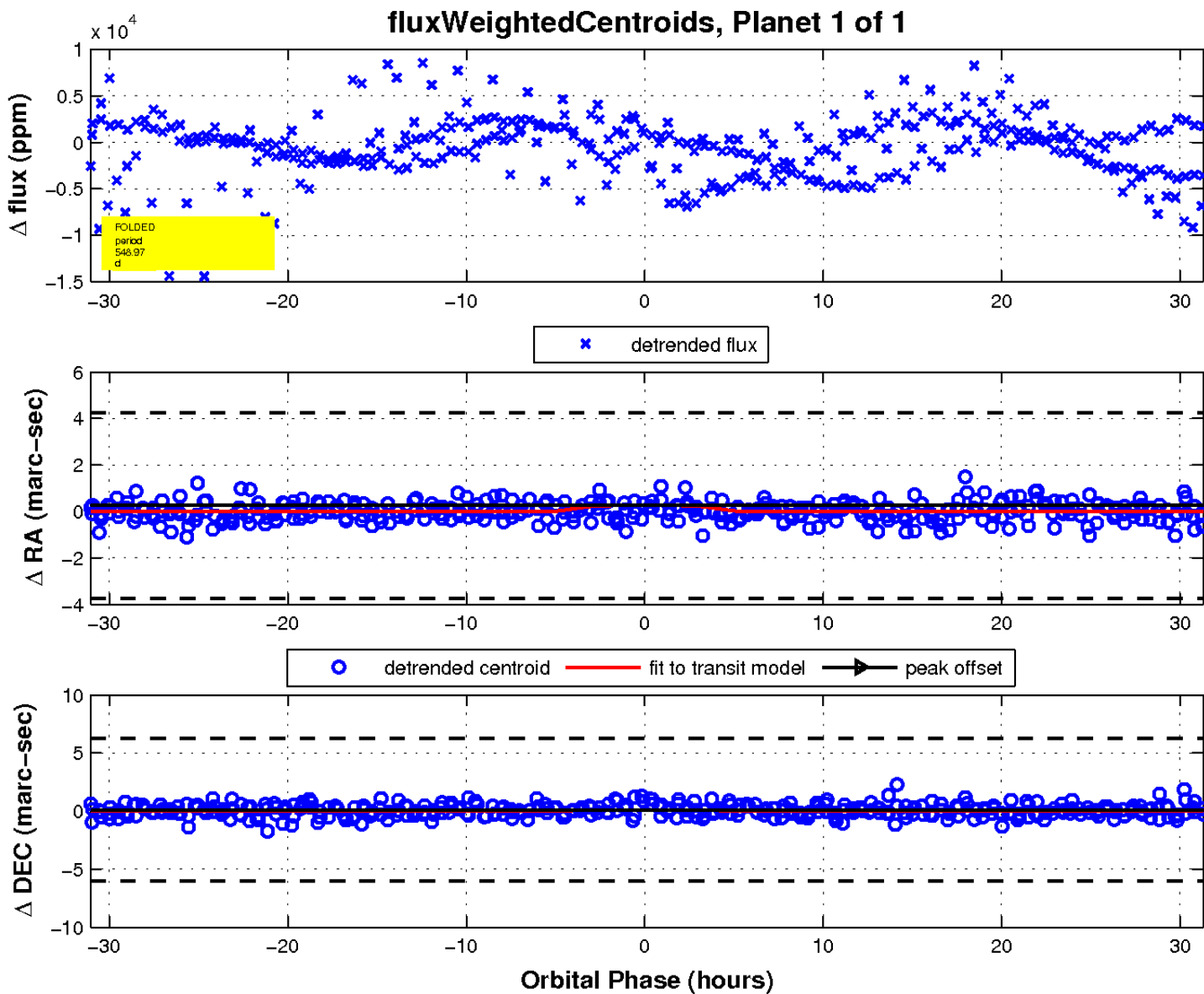
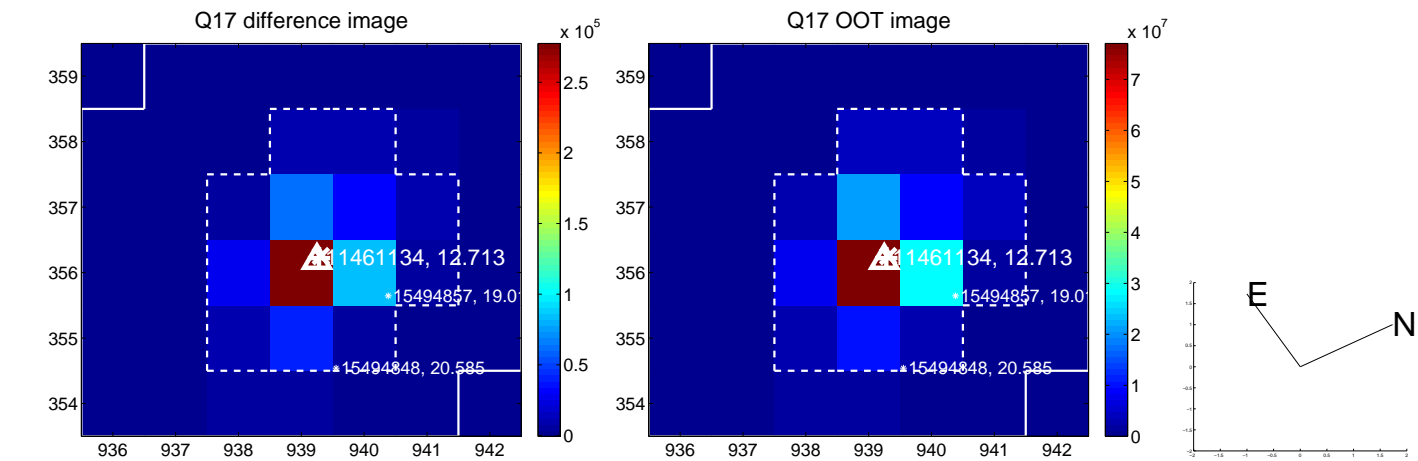
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UKIRT Image

Declination

